



DATE: August 23, 2000

FROM: Intel Customer Service

SUBJECT: 4S4EB2X0.86A Standard BIOS Production Release 17.0

About This Release

- 4S4EB2X0.86A.0024.P17 (Production-17.0)

Features/Errata Fixed In This Release

Production 17.0

- Banner changed to Production 17.0
- Correct ACPI reporting of ComB when set to IRDA mode
- Added processor updates

Production 16.0

- Banner changed to Production 16.0
- Fixed slow boot issue with USB speakers
- Fixed lockup issue with no VGA adapter or add-in adapter with small option ROM
- Corrected ACPI System Descriptor Table OEM_REV to pass Windows 2000* Ready test
- Corrected ACPI Fan return status to pass Windows 2000* Ready test
- Corrected ACPI PCI bus Current Resource Status to pass Windows 2000* Unreported Memory HCT
- Added processor updates
- Fixed DMI reporting of memory device addresses
- Copyright message advanced to 2000
- NOTE: CMOS settings will be reset when upgrading to this release

Production 15.0

- Banner changed to Production 15.0
- Improve year 2000 century rollover algorithm. The new algorithm takes less CPU time.
- Add processor updates

Production 14.0

- Banner changed to Production 14.0
- Several new processor updates
- Fix hang in POST with some USB mice
- Correct POST-time text/graphics display on flat panels

Production 13.0

- Banner changed to Production 13.0
- Fixed APM sleep button resume
- Fixed Windows 98 SE shutdown halt
- Fix DMI ECC settings reporting

Production 12.0

- Banner changed to Production 12.0
- Processor Serial Number setup default changed to "Disabled"

- Numerous revised processor updates.

Production 11.0

- Banner changed to Production 11.0
- Fixed issue of long boot delay with LS-120 plus tape drive
- Fixed issues of ACPI tables stuck at 64MB when system ram is bigger than 64MB
- Fixed issue of NT4.0 SP1 slow with UDMA drives
- Fixed issue of pause (and create DMI event log entry) on cmos checksum error

Production 10.0

- Banner changed to Production 10.0
- Revised processor update for 550MHz Pentium® III Processor (K-C0)

Production 9.0

- Banner changed to Production 9.0
- Added support for 550 MHz Pentium ® III Processor (K-C0)

Production 8.0

- Banner changed to Production 8.0
- Fixed intermittent modem disconnect issue
- Fixed IRQ12 reservation in Setup
- Restored AGP/PCI selection node in Setup
- Fixed W98 error with more than 256Mbyte RAM installed
- Removed Ctrl-Alt-L keyboard locking

Production 7.0

- Banner changed to Production 7.0
- Added support for Processor Serial Number configuration

Production 6.0

- Banner changed to Production 6.0
- Added ACPI update for keyboard and mouse

D-1008

- Fixed Processor Update
- Fixed ACPI Mode unreported memory error
- Updated copyright notice
- Updated processor identification
- Fixed POST time hang with certain keyboards
- Fixed DMI processor information

Production 5.0

- Banner changed to Production 5.0
- Added feature to show or hide the Reserve IRQ 12 SETUP node based on the detection of a PS/2 Mouse connected to the system.
- Fixed an issue where system hangs if an USB device with more than 248 bytes of configuration descriptor is attached.
- Fixed Shift-TAB key combination in the BIOS.
- Fixed issue where pressing the Keyboard Leds keys could cause the System to hang.
- Updated audio code to either show or hide the Audio Enable/Disable Setup option based on the stuffing of PCI audio.
- Added Windows 2000 (NT5.0) support to the BIOS.
- Added Pentium® III K-B0 processor update to the BIOS.
- Added support for reserving IRQ 12 in SETUP if a PS/2 mouse is not attached to the system.
- Added Pentium® II D-B1 processor update to the BIOS.

- Modified Manufacturing Default for ECC Memory to be ENABLED.
- Set Maximum CPU speed as reported by SMBIOS 2.1 to 450MHz.
- Added feature where both Floppy A: and B: SETUP nodes will appear if the on-board floppy controller is DISABLED.

Production 4.0

- Banner changed to Production 4.0
- Banner changed to Beta 10.0.
- Modified Manufacturing Default for ECC Memory to ENABLED.
- Changed setup menu bar to three spaces between items.
- Added support for waking on PME from Suspend and Standby.
- Fixed Win98 HCT7.6 APM1.2 resume-on ring test.
- Fix to allow VESA video power down setup option to function properly.
- Disable QuietBoot Logo in Manufacturing Mode.
- Fixed memory count discrepancy after clearing Splash logo.
- Added SMBIOS 2.1 structure for on-board AGP slot.
- Fixed Power LED implementation for WHQL ACPI HCT testing..
- Added feature where the top diagnostic LED will show green when performing BootBlock recovery.
- Cleared QuietBoot logo to show password prompt.
- Added support for the NCR Cash Register Keyboard.
- Added feature to make PS/2 port swapping work when a USB keyboard is present.
- Support for serial activity resetting the global standby timer.
- Increased PIIX4 SMI checking performance.
- Updated Diagnostic LED codes to latest specifications.
- Fixed Win98 APM mode resume delay with USB keyboard.
- Fixed an issue which was causing the system to hang when reads from CPU Update area was done and HIMEM.SYS was not loaded.
- Added support for "Memory Decreased" error logging in SMBIOS 2.1.
- Added ability to log multiple single-bit ECC errors to the DMI Event Logging.

Production 3.0

- Changed Sub-System Device ID for the Yamaha PCI Audio to 'S2' from 'SE'.

Production 2.0

- Banner Changed to Production 2.0.
- Added BIOS work-around for DEC bridges that will burn without a specific register on the bridge programmed correctly.

Production 1.0

- Added fix for hanging at POST code 6Bh with ECC Memory enabled in SETUP.
- Added fix for hanging at POST code 6Bh with a Pentium® III processor present in the system.
- Added support for disabling clocks for unused DIMM slots to reduce EMI.
- Fixed issue of system hanging with an ISA video card installed and "User Flash" SETUP option ENABLED.
- Fixed issue where user can access the "Boot-Time Diagnostic Screen" SETUP option under "Limited Access" SETUP security mode.
- Fixed issue where system hangs during video initialization with user flash enabled and a user binary loaded.
- COMA now changes to ENABLED when the user sets it to DISABLED and PNP OS is set to YES.
- Corrected Manufacturing Default value for LPT mode to be ECP Mode.
- Corrected PCI IRQ table entries for PCI Audio device.
- Fixed issue where the system would resume from Wake on Ring when Wake on Ring was DISABLED in Power Management.

Known Errata With This Release